

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-85 (canceled)

86. (New) A plant extract demonstrating at least one of a) insulin mimetic activity, b) insulin sensitizing activity, c) alpha glucosidase activity, d) thermogenesis activity, e) enhancing glucose uptake activity by fat cells or peripheral skeletal muscle cells, f) decreasing glucose secretion by hepatocytes at liver, or g) increasing insulin secretion by pancreatic beta cells, having HPLC Fraction ID Nos. as identified in Table 4 or 8 to 11.

87. (New) The plant extract of claim 86, having HPLC Fraction ID Nos. as identified in Table 4.

88. (New) The plant extract of claim 86, having HPLC Fraction ID Nos. as identified in Tables 8 to 11.

89. (New) A composition comprising an antioxidant effective amount of at least one plant extract demonstrating at least one of a) insulin mimetic activity, b) insulin sensitizing activity, c) alpha glucosidase activity, d) thermogenesis activity, e) enhancing glucose uptake activity by fat cells or peripheral skeletal muscle cells, f) decreasing glucose secretion by hepatocytes at liver, or g) increasing insulin secretion by pancreatic beta cells and having HPLC Fraction ID Nos. as identified in Table 4 or 8 to 11, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.

90. (New) The composition of claim 89, wherein the plant extract has HPLC Fraction ID Nos. as identified in Table 4.

91. (New) The composition of claim 89, wherein the plant extract has HPLC Fraction ID Nos. as identified in Tables 8 to 11.

92. (New) A method of treating a degenerative condition, comprising administering to a subject in need thereof an effective amount of a plant extract having HPLC Fraction ID Nos. as identified in Tables 4 or 8 to 11, thereby (a) lowering glucose level or improving glucose uptake, or increasing insulin sensitivity or (b) increasing respiratory enzyme production and subsequent thermogenesis.

93. (New) The method of claim 92, wherein the degenerative condition is selected from the group consisting of cardiovascular disease, diabetes mellitus, hypertension, cancers, obesity, arthritis, pain, Alzheimer's disease, multiple sclerosis, autoimmune diseases, asthma, allergies, osteoporosis, Parkinson's disease, stress, ocular disorders & diseases of the eye.

94. (New) A plant extract as claimed in claim 86, having insulin mimetic activity and selected from the extracts having HPLC Fraction ID No. selected from:

AVDB008Le04(20)bc6C01A00,

AVDB008Le06bc6C01A00,

AVDB006Se07bc6C01A00 and

AVDB005Le07bc6C01A00

95. (New) A plant extract as claimed in claim 86, having an insulin sensitizing activity and selected from the extracts having HPLC Fraction ID No. selected from:

AVDB006Se04(20)bc6C01A00

AVDB018Fr03bc6C01A00

AVDB003Ro06bc6C01A00

96. (New) A plant extract as claimed in claim 86, having thermogenic activity and HPLC Fraction ID No. AVDB008Le04(20)bc6C01A00.

97. (New) A plant extract as claimed in claim 86, having alpha glucosidase activity and selected from the extracts having HPLC Fraction ID No. selected from:

AVDB006Se08bc6C01A00,
AVDB006Se04(20)bc6C01A00,
AVDB006Se06bc6C01A00 and
AVDB006Se04bc6C01A00

98. (New) The method of claim 92, wherein a plant extract having insulin mimetic activity, alpha glucosidase activity, & insulin sensitizing activity, and having HPLC Fraction ID No. AVDB006Se07bc6C01A00, is administered for the treatment of diabetes.

99. (New) The method of claim 92, wherein a combination of plant extracts having HPLC Fraction ID Nos. AVDB012Ap08bc6C01A00, AVDB021Ba08bc6C01A00 and AVDB006Se04(20)bc6C01A00 is administered.

100. (New) The composition of claim 89, comprising a combination of plant extracts having HPLC Fraction ID Nos. AVDB012Ap08bc6C01A00, AVDB021Ba08bc6C01A00 and AVDB006Se04(20)bc6C01A00.

101. (New) The method of claim 92, wherein a combination of plant extracts having HPLC Fraction ID Nos. AVDB010Fr08bc6C01A00, AVDB021Ba08bc6C01A00, and AVDB006Se04(20)bc6C01A00 is administered.

102. (New) The composition of claim 89, comprising a combination of plant extracts having HPLC Fraction ID Nos. AVDB010Fr08bc6C01A00, AVDB021Ba08bc6C01A00, and AVDB006Se04(20)bc6C01A00.

103. (New) The method of claim 92, wherein a combination of plant extracts having HPLC Fraction ID Nos. AVDB012Ap08bc6C01A00 and AVDB006Se04(20)bc6C01A00 is administered.

104. (New) The composition of claim 89, comprising a combination of plant extracts having HPLC Fraction ID Nos. AVDB010Fr08bc6C01A00, AVDB021Ba08bc6C01A00, and AVDB006Se04(20)bc6C01A00.

105. (New) The method of claim 92, wherein a combination of plant extracts having HPLC Fraction ID Nos. AVDB025Se08bc6C01A00, AVDB008Lf08bc6C01A00 & AVDB006Se04(20)bc6C01A00 is administered.

106. (New) The composition of claim 89, comprising a combination of plant extracts having HPLC Fraction ID Nos. AVDB025Se08bc6C01A00, AVDB008Lf08bc6C01A00 & AVDB006Se04(20)bc6C01A00.

107. (New) The method of claim 92, wherein a combination of plant extracts having Fraction ID Nos. AVDB006Se04(20)bc6C01A00 & AVDB021Ba08bc6C01A00 is administered.

108. (New) The composition of claim 89, comprising a combination of plant extracts having Fraction ID Nos. AVDB006Se04(20)bc6C01A00 & AVDB021Ba08bc6C01A00.

109. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se08bc6C01A00 is administered.

110. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se08bc6C01A00.

111. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se04(20)bc6C01A00 is administered.

112. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se04(20)bc6C01A00.

113. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se08bc6C01A00 is administered.

114. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se08bc6C01A00.

115. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se04(20)bc6C01A00 is administered.

116. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se04(20)bc6C01A00.

117. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le08bc6C01A00 is administered.

118. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le08bc6C01A00.

119. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le04(20)bc6C01A00 is administered.

120 (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le04(20)bc6C01A00.

121. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB013Ba08bc6C01A00 is administered.

122. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB013Ba08bc6C01A00.

123. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB013Ba04(20)bc6C01A00 is administered.

124. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB013Ba04(20)bc6C01A00.

125. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Ba08bc6C01A00 is administered.

126. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Ba08bc6C01A00.

127. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB005Fr06bc6C01A00 is administered.

128. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB005Fr06bc6C01A00.

129. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB003Ro06bc6C01A00 is administered.

130. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB003Ro06bc6C01A00.

131. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Ro06bc6C01A00 is administered.

132. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Ro06bc6C01A00.

133. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se06bc6C01A00 is administered.

134. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se06bc6C01A00.

135. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se06bc6C01A00 is administered.

136. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se06bc6C01A00.

137. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le06bc6C01A00 is administered.

138. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le06bc6C01A00.

139. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB018Fr06bc6C01A00 is administered.

140. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB018Fr06bc6C01A00.

141. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB017Fr06bc6C01A00 is administered.

142. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB017Fr06bc6C01A00.

143. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB003Ro03bc6C01A00 is administered.

144. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB003Ro03bc6C01A00.

145. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Ro04bc6C01A00 is administered.

146. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Ro04bc6C01A00.

147. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Ro03bc6C01A00 is administered.

148. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Ro03bc6C01A00.

149. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Seo04bc6C01A00 is administered.

150. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Seo04bc6C01A00.

151. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB004Se04bc6C01A00 is administered.

152. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB004Se04bc6C01A00.

153. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB018Fr04bc6C01A00 is administered.

154. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB018Fr04bc6C01A00.

155. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB011Fr04bc6C01A00 is administered.

156. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB011Fr04bc6C01A00.

157. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB017Fr04bc6C01A00 is administered.

158. (New) The composition of claim 89, further comprising a plant extract having HPLC Fraction ID No AVDB017Fr04bc6C01A00.

159. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se03bc6C01A00 is administered.

160. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se03bc6C01A00.

161. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se03bc6C01A00 is administered.

162. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se03bc6C01A00.

163. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB011Fr03bc6C01A00 is administered.

164. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB011Fr03bc6C01A00.

165. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB017Fr03bc6C01A00 is administered.

166. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB017Fr03bc6C01A00.

167. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB005Fr03bc6C01A00 is administered.

168. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB005Fr03bc6C01A00.

169. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le06bc6C01A00 is administered.

170. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le06bc6C01A00.

171. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Fr03bc6C01A00 is administered.

172. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Fr03bc6C01A00.

173. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Ro07bc6C01A00 is administered.

174. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Ro07bc6C01A00.

175. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se07bc6C01A00 is administered.

176. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se07bc6C01A00.

177. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se07bc6C01A00 is administered.

178. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se07bc6C01A00.

179. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB018Fr07bc6C01A00 is administered.

180. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB018Fr07bc6C01A00.

181. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le07bc6C01A00 is administered.

182. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le07bc6C01A00.

183. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le05bc6C01A00 is administered.

184. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le05bc6C01A00.

185. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Ro02bc6C01A00 is administered.

186. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Ro02bc6C01A00.

187. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se02bc6C01A00 is administered.

188. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se02bc6C01A00.

189. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Se02bc6C01A00 is administered.

190. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Se02bc6C01A00.

191. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB018Fr02bc6C01A00 is administered.

192. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB018Fr02bc6C01A00.

193. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le06bc6C01A00 is administered.

194. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le06bc6C01A00.

195. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le02bc6C01A00 is administered.

196. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le02bc6C01A00.

197. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB020Le08bc6C01A00 is administered.

198. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB020Le08bc6C01A00.

199. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le04bc6C01A00 is administered.

200. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le04bc6C01A00.

201. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le03bc6C01A00 is administered.

202. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le03bc6C01A00.

203. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le04bc6C01A00 is administered.

204. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le04bc6C01A00.

205. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB002Le07bc6C01A00 is administered.

206. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB002Le07bc6C01A00.

207. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB018Fr03bc6C01A00 is administered.

208. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB018Fr03bc6C01A00.

209. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le02bc6C01A00 is administered.

210. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le02bc6C01A00.

211. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB003Ro04bc6C01A00 is administered.

212. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB003Ro04bc6C01A00.

213. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le03bc6C01A00 is administered.

214. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le03bc6C01A00.

215. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB013Ba04bc6C01A00 is administered.

216. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB013Ba04bc6C01A00.

217. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le09bc6C01A00 is administered.

218. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le09bc6C01A00.

219. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB008Le01bc6C01A00 is administered.

220. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB008Le01bc6C01A00.

221. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se09bc6C01A00 is administered.

222. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se09bc6C01A00.

223. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB019Se01bc6C01A00 is administered.

224. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB019Se01bc6C01A00.

225. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB005Le07bc6C01A00 is administered.

226. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB005Le07bc6C01A00.

227. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB005Le05bc6C01A00 is administered.

228. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB005Le05bc6C01A00.

229. (New) The method of claim 92, wherein a plant extract having HPLC Fraction ID No AVDB006Se05bc6C01A00 is administered.

230. (New) The composition of claim 89, comprising a plant extract having HPLC Fraction ID No AVDB006Se05bc6C01A00.

231. (New) A successive plant extract demonstrating at least one of a) insulin mimetic activity, b) insulin sensitizing activity, c) alpha glucosidase activity, d) thermogenesis activity, e) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells, f) decreasing glucose secretion by hepatocytes at liver and g) increasing insulin

secretion by pancreatic beta cells, having an HPLC Fraction ID Nos. as identified in Table 12.

232. (New) A composition comprising an antioxidant effective amount of at least one successive plant extract demonstrating at least one of a) insulin mimetic activity, b) insulin sensitizing activity, c) alpha glucosidase activity, d) thermogenesis activity, e) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells, f) decreasing glucose secretion by hepatocytes at liver and g) increasing insulin secretion by pancreatic beta cells and having HPLC Fraction ID Nos. as identified in Table 12, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.

233. (New) A composition comprising an antioxidant effective amount of at least one derivative molecule of a bioactive obtained from the successive plant extract as shown in Table 12, the molecule demonstrating at least one of a) insulin mimetic activity, b) insulin sensitizing activity, c) alpha glucosidase activity, d) thermogenesis activity, e) enhanced glucose uptake activity by fat cells or peripheral skeletal muscle cells, f) decreasing glucose secretion by hepatocytes at liver and g) increasing insulin secretion by pancreatic beta cells, and at least one pharmaceutically acceptable carrier, additive, diluent, or excipient.